

REMARKS

Claims 1-14 are pending in this application. By this Amendment, claims 1-11 are amended and claims 12-14 are added. Support for the amendments to claim 1 can be found at least in Figures 1 and 2; support for the amendments to claim 8 can be found at least in the subject matter of claim 1; and support for new claims 12-14 can be found at least in Figure 3. Claims 1-11 are also amended for form and/or antecedent basis. No new matter is added.

The courtesies extended to Applicants' representative by Examiner Dinh at the interview held April 28, 2009 are appreciated. The reasons presented at the interview as warranting favorable action are incorporated into the remarks below, which constitute Applicants' record of the interview.

I. Allowable Subject Matter

Applicants appreciate the Office Action's indication that claims 8-11 would be allowable if rewritten to overcome the §112, second paragraph, rejection, and to include all features of the base claim and intervening claims. As discussed above, claim 8 is amended into independent form. Further, as discussed below, the §112, second paragraph, rejection is moot in view of the Preliminary Amendment filed on June 5, 2006. Thus, for at least these reasons, Applicants respectfully submit that claim 8, and claims 9 and 10 depending therefrom, are allowable. Further, the remaining claims are allowable for at least the reasons discussed below.

II. Claims 8-11 Satisfy Formal Requirements

Claims 8-11 are objected to for an informality in the preamble; and claim 8 is objected to for improper dependent form. By this Amendment, claims 8-11 are amended responsive to the objections. Withdrawal of the objections is thus respectfully requested.

III. Claims 8-11 Satisfy The Requirements Under 35 U.S.C. §112, Second Paragraph

Claims 8-11 are rejected under 35 U.S.C. §112, second paragraph for being indefinite. Specifically, the Office Action asserts that in claim 8, line 2 and claim 9, line 1, it is unclear what "it" stands for. As discussed during the personal interview, the Preliminary Amendment filed on June 5, 2006 amended claims 8-11 to remove "it." Thus, the rejection is moot.

IV. The Claims Define Patentable Subject Matter

Claims 1-7 are rejected under 35 U.S.C. 102(e) over U.S. Patent No. 6,512,494 to Diaz et al. The rejection is respectfully traversed.

As tentatively agreed during the personal interview, Figure 17 of Diaz does not disclose "four adjacent coplanar eccentric loops, the eccentric loops being structured and supplied to create a rotating field predominantly in a plane parallel to a plane of the antenna, the eccentric loops being spaced apart from each other and being spaced from a center of the central loop, and a center of gravity of each eccentric loop being arranged substantially on a periphery of the central loop," as recited in independent claim 1.

The Office Action asserts that loops 804 in layer 902 of Diaz correspond to a central loop; and loops 804 in layer 904 of Diaz correspond to four adjacent coplanar eccentric loops, as previously recited in claim 1.

However, as discussed during the personal interview, Figure 17 of Diaz shows that the loops 804 in the layer 902 are spaced together around the center of the loop 804 in the layer 904 of an artificial magnetic conductor (high-impedance surface) (hereinafter "AMC") 800.

Further, Diaz does not disclose a substantially flat rotating field antenna that includes a central loop "structured to create a magnetic field essentially perpendicular to the antenna;" and four adjacent coplanar eccentric loops "structured and supplied to create a rotating field predominantly in a plane parallel to a plane of the antenna," as recited in independent claim 1.

As discussed during the personal interview, the loops 804 of the AMC of Diaz cannot create a magnetic field or a rotating magnetic field. The loops 804 are located above and connected to a backplane 806 by an array of electrically conductive vias 808 (col. 9, lines 4-8). The loops 804 of Diaz are also not supplied by a power source. Therefore, the AMC of Diaz cannot create a magnetic field. Additionally, the AMC of Diaz cannot be used to detect RFID tags irrespective of their position, which can be achieved by the claimed antenna. Thus, the loops 804 of Diaz do not correspond to the claimed central loop "structured to create a magnetic field essentially perpendicular to the antenna;" and the claimed four adjacent coplanar eccentric loops that are "structured and supplied to create a rotating field predominantly in a plane parallel to a plane of the antenna."

Further, the AMC is a passive structure that reflects the field of an antenna. The AMC of Diaz, itself, is not an antenna. Thus, Diaz does not disclose the claimed antenna.

Thus, for at least these reasons, claim 1 is patentable over Diaz. Further, claims 2-7, which depend from claim 1, are also patentable over Diaz for at least the reasons discussed above, as well as for the additional features they recite. Withdrawal of the rejection is thus respectfully requested.

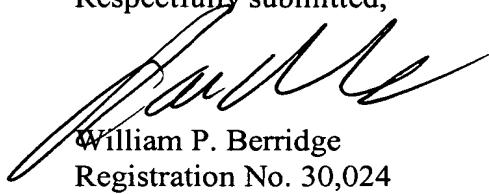
Further, new claims 12-14 are also patentable over Diaz. For example, claims 12 and 13, depend from claim 1, and thus are also patentable over Diaz for at least the reasons discussed above, as well as for the additional features they recite. Further, Diaz does not disclose the features of claim 14, for example, "two conductors, each conductor forming a pair of non-adjacent coplanar eccentric loops."

V. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachment:

Petition For Extension of Time

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